

use of said one or more external devices in said instant on mode of operation to the exclusion of
 said second processor block, or to selectively couple said one or more external devices to said
 second processor block through at least one of said plurality of input/output ports to facilitate use
 of said one or more external devices in said non instant on mode of operation to the exclusion of
 said first processor block wherein said one or more switching mechanisms includes a digital
 multiplexor.

REMARKS

Claims 1-20 are pending in the application. In the above Office Action the Examiner has
 rejected claims 1-20 in the manner discussed below. By this Amendment claims 1, 2-4, 6, 8-12,
 14, 17-18 and 20 have been amended in order to further define the present invention. Attached
 hereto is a marked-up version of the changes made to the claims by the current Amendment. The
 attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

In the first rejection made within the above Office Action, the Examiner rejected claims
 1, 2, 4-10, 12-17 and 19-20 under 35 U.S.C. §103(a) as being unpatentable over Chaiken et al
 (U.S. Patent No. 6,116,767).

Other than obliquely referring to Fig. 1 of Chaiken, Applicant respectfully observes that
 the Examiner has not provided any specific reference to the Chaiken specification in support of
 the Examiner's contention that Chaiken renders the above claims unpatentable. Applicant has
 nonetheless reviewed the Chaiken reference, and respectfully submits that it fails to show or
 suggest at least two aspects of the present invention as defined by the above claims. Namely,
 Chaiken does not describe or suggest either (i) the claimed switching means, or (ii) the claimed
 plurality of input/output devices capable of selectively being used in conjunction with a first or
 second plurality of electronic components.

Applicant observes that Chaiken describes a computer system which supports a
 secondary operational mode (i.e., an "audio CD mode") in which traditional system BIOS is
 bypassed. This mode is intended to enable audio CDs to be played in a CD-ROM drive without
 running an operating system (see, e.g., Chaiken at col. 4, lines 30-35). During operation in this
 secondary mode, the input and output devices of the computer system active during its primary
 mode of operation are not utilized. Instead, the computer system is configured to include a
 number of dedicated controls available to a user during operation in the audio CD mode. As
 described by Chaiken, these controls enable playback of audio CDs to be controlled without

waiting for execution of the lengthy booting process associated with conventional computer operation:

A conventional computer system has required a user to access numerous locations, software and hardware, to adjust audio tracks or to adjust the volumes of various audio sources such as a CD, wave, and synthesizer for music listening. These locations typically include a mixer in a Windows CD-ROM drive application for controlling the volume of audio sources and selecting tracks, a software master volume control in a Windows task bar, and a hardware volume thumbwheel. As these volume control sources controlled volume independent of each other, it was necessary for a user to sort through cumbersome CD-ROM drive software to adjust the volume of the appropriate audio sources. In light of the software nature of certain volume controls, it was also necessary to maintain the portable computer case in an open state with the display screen visible to a user to allow for certain volume adjustments during music listening or allow for track changes.

In the present invention, the master volume control buttons 35 allowing for a single source of volume control which is accessible while the portable computer case C is in a closed state. The master volume control buttons 35 are digital and are preferably connected directly to the audio chip 34. The volume up button and the volume down button of the master volume control buttons 35 are hardwired inputs to the audio chip 34. [6:30-53]

It is thus apparent that Chaiken describes the use of dedicated input elements (e.g., control buttons 35) and dedicated output elements (e.g., track indicator 61 of FIG. 5) during operation in the audio CD mode, and that the input/output elements used during primary mode operation are unavailable. For example, note that the above excerpt indicates that the computer case C is in a closed state during operation in the audio CD mode, which would not permit use of the display screen 406 that is active during primary mode operation. Accordingly, Chaiken fails to describe the claimed plurality of input and output devices capable of being used in conjunction with different pluralities of components during different operational modes, since Chaiken contemplates using one set of input/output elements during primary mode operation and a different set of input/output elements during operation in the audio CD mode. It thus also follows that Chaiken fails to describe or suggest the claimed switching means for selectively coupling a single plurality of input/output devices to different sets of electronic components during different operative modes, since the different arrangements of input/output elements used during different operative modes in Chaiken's system render such a switch unnecessary.

Notwithstanding the clear differences between Chaiken and the previously pending claims highlighted above, the claims have been amended in order to render the distinction between the present invention and the cited prior art more readily apparent. Specifically, the claims now recite that the processors or groups of components associated with the claimed

instant on and non-instant-on modes execute or otherwise operate in accordance with different operating systems. Since the Chaiken system does not utilize an operating system during audio CD mode operation, it follows that Chaiken does not describe or suggest the use of different first and second operating systems as presently claimed:

Audio CD mode is a secondary operational mode which enables the computer system S of the present invention to bypass traditional system BIOS and play audio CDs in a CD-ROM drive 28 without running an operating system.
[4:31-35]

The Examiner has also rejected claims 1, 2, 4-10, 12-17 and 19-20 under 35 U.S.C. §103(a) as being unpatentable over Jacobs et al (U.S. Patent No. 6,006,285). As the specifications of the Jacobs and Chaiken references are substantially similar (i.e., the Chaiken application is a continuation-in-part of the Jacobs application), pending claims 1, 2, 4-10, 12-17 and 19-20 are believed to be patentable in view of both Jacobs and Chaiken for the reasons discussed above.

In the above Office Action the Examiner has also rejected claims 1-20 under 35 U.S.C. §103(a) as being unpatentable over applicant's admitted prior art in view of Chaiken et al (U.S. Patent No. 6,116,767). The Examiner premises this rejection in part upon the alleged disclosure by Chaiken of the claimed switching mechanisms. As stated above, Applicant respectfully submits that Chaiken fails to describe or suggest the switching mechanisms of the present invention. Again, this results from Chaiken's use of one set of input/output devices during operation in a primary mode (e.g., screen 406 and key board 48), and a different set of input/output devices during operation in the second "audio CD mode" (e.g., track indicator 61 and master volume control buttons 35). It thus must follow that Chaiken fails to describe or suggest the claimed switching means for selectively coupling a single plurality of input/output devices to different sets of electronic components during different operative modes, since in Chaiken's system different arrangements of input/output elements are used during different operative modes. That is, in Chaiken's system it is unnecessary to provide the claimed switching mechanism since the input/output devices utilized during primary mode operation are not used during secondary mode operation, and vice-versa.

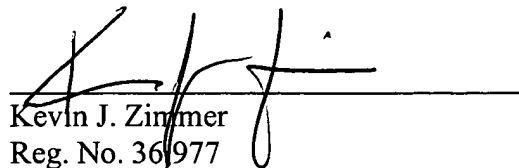
Applicant respectfully requests entry of the amendments described herein prior to further examination of the above-identified application. The undersigned would of course be available to discuss the present application with the Examiner if, in the opinion of the Examiner, such a discussion could lead to resolution of any outstanding issues.

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE****In the Claims**

1. (Three Times Amended) An apparatus comprising:
 - a first plurality of electronic components defining an instant on mode of operation, said first plurality of electronic components being controlled by a first operating system;
 - a second plurality of electronic components defining a non-instant on mode of operation, said second plurality of electronic components being controlled by a second operating system different from said first operating system;
 - a plurality of input/output devices capable of being used in conjunction with said first plurality of electronic components during said instant on mode of operation and with said second plurality of electronic components during said non-instant on mode operation; and
 - one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

2. (Three Times Amended) An apparatus comprising:
 - a first plurality of electronic components defining an instant on mode of operation;
 - a second plurality of electronic components defining a non-instant on mode of operation;
 - a plurality of input/output devices wherein said first plurality of electronic components includes a first processor to execute instructions representing a first operating system and said second plurality of electronic components includes a second processor to execute instructions representing a second operating system different from said first operating system; and
 - one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second

plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

3. (Three Times Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation wherein said first plurality of electronic components includes a first processor to execute instructions representing a first operating system;

a second plurality of electronic components defining a non-instant on mode of operation and including a second processor to execute instructions representing a second operating system different from said first operating system, wherein said first plurality of electronic components includes a first memory device and said second plurality of electronic components includes a second memory device, and wherein after start up said first and second processors operate simultaneously to synchronize data between said first and second memory devices;

a plurality of input/output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

4. (Three Times Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation;

a second plurality of electronic components defining a non-instant on mode of operation, wherein at least one of said first and second plurality of electronic components includes a processor having at least two operating modes, wherein when in a first operating mode said processor executes instructions representing a first operating system, and when in a second operating mode said processor executes instructions representing a second operating system different from said first operating system;

a plurality of input/output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

6. (Twice Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation, said first plurality of electronic components being controlled by a first operating system;

a second plurality of electronic components defining a non-instant on mode of operation, said second plurality of electronic components being controlled by a second operating system different from said first operating system;

a plurality of input/output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components wherein said one or more switching mechanisms includes a digital multiplexer.

8. (Three Times Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in first instant on mode of operation, said plurality of function blocks being controlled by a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation, said plurality of electronic components being controlled by a second operating system different from said first operating system;

a plurality of input and output devices capable of being used in conjunction with said plurality of function blocks during said first instant on mode of operation and with said plurality of electronic components during said second non-instant on mode operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

9. (Twice Amended) An apparatus comprising:

an integrated circuit having a first plurality of function blocks for use in a first instant on mode of operation wherein said first plurality of function blocks includes a first processor to execute instructions representing a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation, and wherein said second plurality of electronic components includes a second processor to execute instructions representing a second operating system different from said first operating system;

a plurality of input and output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said first plurality of function blocks.

10. (Twice Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation wherein said plurality of function blocks includes a first processor to execute instructions representing a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation wherein said second plurality of electronic components includes a second processor to execute instructions representing a second operating system different from said first operating system;

a plurality of input and output devices;

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks; and

a connector interface to couple said one or more switching mechanisms to said integrated circuit.

11. (Three Times Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation wherein said plurality of function blocks includes a first memory device and a first processor to execute instructions representing a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation wherein said second plurality of electronic components includes a second memory device and a second processor to execute instructions representing a second operating system different from said first operating system and wherein said first and second processors operate simultaneously to synchronize data stored within said first and second memory devices;

a plurality of input and output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

12 (Three Times Amended). An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in first instant on mode of operation;

a plurality of electronic components for use in a second non-instant on mode of operation wherein at least one of said plurality of function blocks and said plurality of electronic components includes a processor having at least two operating modes, wherein when in a first operating mode, said processor executes instructions representing a first operating system, and when in a second operating mode, said processor executes instructions representing a second operating system different from said first operating system;

a plurality of input and output devices; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

14. (Twice Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation, said plurality of function blocks being controlled by a first operating system;

a plurality of electronic components for use in a second non-instant on mode of operation, said plurality of electronic components being controlled by a second operating system different from said first operating system;

a plurality of input and output devices wherein said plurality of input and output devices includes a user input device and a display device; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic

components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

17. (Twice Amended) An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation in accordance with a first operating system;

a second processor block to operate in a second non-instant on mode of operation in accordance with a second operating system different from said first operating system;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said plurality of external devices includes a user input device and a display device.

18. (Three Times Amended) An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation, said first processor block executing a first operating system;

a second processor block to operate in a second non-instant on mode of operation, said second processor block executing a second operating system different from said first operating system;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said one or more external devices includes a first memory device and a second memory device, and wherein after start up said first and second processor

blocks operate simultaneously to synchronize data between said first and second memory devices.

20 (Twice Amended). An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation, said first processor block executing a first operating system;

a second processor block to operate in a second non-instant on mode of operation, said second processor block executing a second operating system;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said one or more switching mechanisms includes a digital multiplexor.